Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

DOCKET FILE COPY ORIGINAL

In the Matter of	)	
	)	
Amendment of Part 97 of the	)	
Commission's Rules to Eliminate	)	
Certain One-Way Communications in	)	RM-8626
the Amateur Radio Service Medium	)	
and High Frequency Bands	)	

To: The Commission

COMMENTS IN OPPOSITION
by Gordon R. Smith

Frederick O. Maia has stated that misuse of the HF bulletin privilege has caused so much "anger" among amateur operators the the only sensible solution is to outlaw all bulletins, code practice, code proficiency tests, etc. from the amateur bands below 30 MHz. I believe he has greatly overstated the anger and understated the utility of these transmissions.

THE COMMENTER

My name is Gordon R. Smith. I have been licensed as a radio amateur since 1959 and currently hold an Extra Class operator license and the station license for K7HFV. My amateur radio experience during my teen-age years was largely responsible for my going to college in Electrical Engineering and pursuing a career in electronics.

I am active on both VHF and HF amateur bands and am an officer in a club that has over 700 members. I am the liason for a volunteer examiner team that examines over 200 applicants each year. In these capacities I contact a large number of amateur operators in my state.

ARRL BULLETINS ARE VALUABLE

The American Radio Relay League disseminates a large number of bulletins through its headquarters station, W1AW. These bulletins are in great demand through the Amateur Service. They are read on nets, disseminated in local bulletin transmissions on voice, Morse code, and digital modes, and carried on computer "on-line" services. They include information about FCC actions and proposals, contests, propagation forecasts, activity reports of foreign ("DX") stations, and announcements of emergencies and reserved frequencies. Their wide distribution is testimony to their utility to a large number of radio amateurs.

HF TRANSMISSION IS STILL THE BEST MEANS OF DISTRIBUTION

About two years ago I took on the job of keeping the latest

bulletins posted to a packet radio "gateway" station which serves both as an electronic bulletin board and a gateway between amateur packet radio and Internet. This gateway provides local distribution of the bulletins on VHF as well as initiating distribution via Internet to several other similar gateways in other cities. Each evening I check all the sources I reasonably can for new bulletins so that I can post them to the gateway. The sources include the HF transmissions from W1AW, an Internet mailing list, two Internet newsgroups, the on-line services CompuServe and GEnie, and the telephone bulletin board operated by ARRL. My experience is that at least eighty percent of the bulletins issued arrive sooner by the HF transmissions than by any of the other media. The difference is usually several hours, and often one or more days. Some bulletins never arrive at all except via the HF circuits.

A day's delay can be crucial for many types of bulletins, including announcements of emergency frequencies, upcoming contest changes and special events.

It might be of interest that it was via HF bulletins that I learned of Mr. Maia's petition.

ON-LINE SERVICES HAVE MANY DISADVANTAGES

Mr. Maia suggests that on-line services, Internet, and VHF packet radio can substitute for HF distribution of bulletins. The current state of the VHF packet relay system makes it an intolerably slow method of delivery. (In my area, bulletins rarely appear on bulletin boards relying on VHF distribution until two to three days after they are released.) The on-line services and Internet distribution schemes have a number of disadvantages:

1. They are, in most cases, slower than HF distribution, sometimes by days. Often, bulletins must be manually posted by system operators or must propagate through the network at low priority.
2. They are not freely available to all amateurs. In most cases there are monthly and hourly fees involved for access to on-line services and Internet service providers. The bulletin board requires paying long-distance telephone charges.
3. They are available only to amateurs with computers and modems.
4. Many services require their users to agree to terms that limit the further distribution of material obtained from them.
5. They rely heavily on the integrity of land-based wire and fiber systems, subject to disruption in an emergency. One of the better Internet sources is a mailing-list maintained by the Boston Amateur Radio Club. Messages originated in Connecticut are redistributed by a server in California (at NetCom). Thus, coast-to-coast circuit integrity is required before distribution can even begin.
6. Some of these sources actually rely on HF to feed them. I would not be surprised if amateurs using one of the gateway stations that subscribe to my list would say "I don't need HF; I get my bulletins from Internet!"

In short, if Mr. Maia believes these alternate avenues can substitute for the HF transmissions, I suspect he has not tried to keep a local bulletin distribution system running using these sources and then compared the results to those possible using HF.

HF CODE PRACTICE IS VALUABLE

Mr. Maia dismisses HF code practice with a single sentence: "Similarly, code practice is now easily accomplished via software training and simulation programs."

It is my experience as a volunteer examiner that those who have studied only via computer have a much lower pass-rate than those who have gained some experience on HF, either through making two-way contacts (for those who already hold an appropriate license) or by listening to code practice transmissions. Although software tools are very helpful, they fall short of being a complete solution for all people to the problem of learning code and increasing code speed. Computer-generated code has a number of shortcomings:

1. It is available only to those with computers.
2. One must generally listen either to random characters or words, or to simulated contacts. The random characters provide the student with no practice recognizing words or dealing with text that begins to make sense as it is written down. The simulated contacts generally fit a consistent pattern that is soon memorized, leaving the student with little exposure to general text. When text is used, it usually must be supplied by the user. Text that has already been read and keyed-in by the student is of little practice value. The ideal practice source is straight text that is new for each practice session -- something easily provided by on-air practice sessions.
3. The tone produced by most combinations of hardware and software is a hard-keyed square wave, which is very different from the soft-keyed sine wave heard on the air and in most examination settings. This difference, alone, has been responsible for candidates failing code tests when they believed they were prepared.

The code practice provided by W1AW and other stations provides code students with text that is fresh daily, is sent at a variety of speeds, and that can be readily checked against a printed source. The tone and keying are the same as those the student is likely to encounter in actual on-air operation. Code generated by home computers generally does not have these characteristics.

THE CODE PROFICIENCY PROGRAM WOULD ALSO BE IN JEOPARDY

Mr. Maia does not mention it, but the changes suggested in his petition would also put an end to ARRL's code proficiency program. Under this program, ARRL sends, several times each month, text that amateurs and others are encouraged to copy to demonstrate their copying ability. The copied text is sent to

ARRL Headquarters where it is verified. Those who successfully copy a solid minute or more are sent a certificate or an endorsement sticker to confirm the highest speed successfully copied. By providing a tangible reward, this program encourages amateurs to increase their proficiency beyond that required by their license tests. I am not aware of a similar program available by any other means.

THE BENEFITS OUTWEIGH THE DISADVANTAGES

There are undoubtedly abuses of the bulletin and code practice rules. However, their detrimental effects seem small compared to the benefits these transmissions provide. I have talked to many amateurs in my area who have copied and benefitted from HF bulletin and code-practice transmissions. I have yet to encounter a single one who experiences the anger that Mr. Maia implies to be practically universal. In fact, it appears likely that Mr. Maia's anger is directed at a single east-coast station. Surely occasional abuses can be dealt with on a case-by-case basis as are other kinds of violations. The current rules clearly outlaw malicious interference and general broadcasting. There is no need to outlaw many valuable services in order to deal with an occasional misuse.

Respectfully submitted,

Gordon R. Smith

Gordon R. Smith
632 University Street
Salt Lake City, Utah 84102-3213